



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,223	04/20/2001	Rich Chen	MR1957-533	9197
4586	7590	05/05/2004	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			SHAPIRO, LEONID	
			ART UNIT	PAPER NUMBER
			2673	

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/838,223

Applicant(s)

CHEN, RICH

Examiner

Leonid Shapiro

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 10-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 10-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen (US Patent No. 5,144,422) in view of Shimamura (US Patent No. 4,977,536).

As to claim 1, Allen teaches an auxiliary device for editing documents (See Figs 1-2, items 28, 28', Col. 1, Lines 10-14), comprising: a computer keyboard having an internal circuit with a single-chip microprocessor (See Fig. 1-2, items 28, 28', Col. 5, Lines 35-38 and Col. 6, Lines 10-15); and a modular key set with a document editing function (See Figs 1-2, items 28, 28', Col. 1, Lines 10-14 and Col. 4, Lines 42-44); the modular set being arranged on computer keyboard (See Fig. 2, item 28', Col. 6, Lines 4-21) and connected to an I/O bus of single-chip microprocessor (See Figs. 1-2, items 28, 28', Col. 5, Lines 35-38 and Col. 6, Lines 10-15); single-chip microprocessor generating a pseudo composite-key code corresponding to a individual key in the modular key set pressed by a user (See Figs. 1-2, items 28, 28', from Col. 4, Line 66 to Col. 5, Line 14); whereby the user can directly edit a document by using the modular key set provided on the computer keyboard without chording (See Figs. 1-5, items 34, 36, Col. 5, Lines 12-14); modular key set including a cut key, a paste key, a copy key (See Figs 1-5, items 34, 36, Col. 5, Lines 38-42).

Allen does not show a modular key set (keyboard extension in the Allen reference) includes a mark key functioning to identify a segment of a document to be copied or cut.

Shimamura teaches mark keys for dividing the document data into large blocks (See Figs. 2, 10, items 12, 14, 12A, 14A, Col. 2, Lines 35-49 and Col. 5, Lines 18-31).

It would have been obvious to one of ordinary skill in the art at the time of invention to add mark key as shown by Shimamura to the modular set in the Allen apparatus to identify a segment of a document to be copied or cut in order to provide a document processor which can easily process document (See Col. 1, Lines 38-41 in the Shimamura reference).

As to claims 10-12, Allen teaches modular key set corresponding to the cut, paste and copy keys (See Figs. 1-5, items 34, 36, Col. 5, Lines 38-42) corresponding to the pseudo composite-key code (See Col.6, Lines 22-29).

As to claim 13, Allen does not show a modular key set (keyboard extension in the Allen reference) includes a mark key.

Allen teaches mouse keys to mark particular location and data blocks to identify a segment of a document to be copied or cut (to indicate which data is targeted for manipulation in the Allen reference) (See Figs. 1-2, items 30, 32, Col. 4, Lines 37-41 and Col. 6, Lines 60-64).

Since Allen teaches that the data manipulation keypad may be reprogrammed by the user (See Col. 5, Lines 42-50), corresponding to the pseudo composite-key code (See Col.6, Lines 22-29), it would have been obvious to one of ordinary skill in the art at the time of invention to add (move) mark key to the modular set in the Allen apparatus to identify a segment of a document to be copied or cut in order to expediently perform data manipulation operations (See Abstract in Allen reference).

2. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Allen and Shimamura in view of Krause et al. (US Patent No. 6,154,757).

Allen and Shimamura do not show short-cut key is further provided on the computer peripheral to invoke an associated program.

Krause et al. teaches shortcut keys which automatically advance the text displays (See Fig. 4B, item 447, in description See Col. 10, Lines 33-39).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement short-cut key as shown by Krause et al. in Allen and Shimamura apparatus in order to enhanced a user ability for moving around with a text (See Col. 1, Lines 24-29 in Krause et al. reference).

3. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen, Shimamura and Krause et al. al. as aforementioned in claim 2 in view of Kraft.

Allen, Shimamura and Krause et al. do not teach a short-cut key.

Kraft teaches paste key out of modular set (See 2-3, 8, items 2-3, in description See Col. 4, Lines 56-68 and Col. 5, Lines 1-12).

Kraft does not teach a short-cut keys.

It would have been obvious to one of ordinary skill in the art at the time of invention to add to modular key set different keys as shown by Kraft in the Allen, Shimamura and Krause et al. apparatus to use predetermined pseudo composite-key code of modular key set in order to

Art Unit: 2673

provide a method of transferring data from one application to another (See Col. 1, Lines 46-49 in Kraft reference).

4. Claims 3, 14-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Allen and Shimamura as aforementioned in claim 1 in view of Hsu et al. (US Patent No. 6,320,519 B1).

Allen and Shimamura do not show switch key with LED and a plurality of composite keys and the functions of the composite keys controlled by a switch key.

Hsu et al. teaches switch key (symbol key) with LED (for ScrollLock key) and a plurality of composite keys and the functions of the composite keys controlled by a switch key (See Fig. 1-2, item 15-26, in description See Col. 3, Line 37 and Col. 4, Lines 58-67, Col. 5, Lines 58-68).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement switch key to modify composite keys for redo, undo, bold, open, new, save, find, forward and function keys F1-F12 as shown by Hsu et al. in the Allen and Shimamura apparatus to use predetermined pseudo composite-key code of modular key set in order to switch a plurality of switchable keys between a first key code set and second key code set with a single modifier key (See Col. 2, Lines 17-20 in Hsu et al. reference).

Response to Amendment

5. Applicant's arguments filed on 02-18-04 with respect to claims 1-3, 10-24 have been considered but are moot in view of the new ground(s) of rejection.

Telephone inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ls



**VIJAY SHANKAR
PRIMARY EXAMINER**